

II. REMARKS**A. Summary**

In the present Office Action: the specification was objected to for allegedly not providing proper antecedent basis for claims 12, 14, 24, 26, and 40; claims 12, 14, 24, 26, and 40 were examined and rejected under 35 U.S.C. 112 as allegedly failing to comply with the enablement requirement; claims 1-4, 9, 15-18, 22, and 29 were examined and rejected under 35 U.S.C. 102 as allegedly being anticipated by Salviam-Brun (French Patent No 2,457,928); claims 5-8, 10-14, 19-21, 23-25, 27, 28, and 30-44 were examined and rejected under 35 U.S.C. 103 as allegedly being unpatentable over various combinations of Salviam-Brun, Coburn (U.S. Patent No. 4,643,271), Sullivan (U.S. Patent No. 5,443,324), Thommen, Jr. (U.S. Patent NO. 5,961,099), Shima et al. (U.S. Patent No. 6,006,858), and Keller et al. (NPL document entitled "Guidelines Bridge Rails and Median Barriers dated 2/26/2003).

By this amendment, claims 2, 3, 12, 14, 24, 26, and 40 are canceled without prejudice, and claims 1, 4, 6, 7, 8, 9, 15, and 17 are currently amended. No new matter has been added.

B. Explanation of Amendments

Independent claim 1 is amended to include the limitations of dependent claims 2 and 3. Claims 4, 6, 7, 8, 9, and 15, which variably depend from canceled claims 2 and 3, are amended to depend from claim 1. Claim 17 is amended to recite a plurality of transverse beams each having a first end coupled to a back surface of the longitudinal barrier and a second end coupled to the traffic noise barrier wall for supporting the traffic noise barrier wall. Support for this amendment can be found in Fig. 2 of Applicants' as-filed specification. These amendments are made to place the claims in condition for allowance. No new matter has been added.

C. Objections

In the present Office Action, the specification was objected to for allegedly not providing proper antecedent basis for claims 12, 14, 24, 26, and 40. By this amendment, claims 12, 14, 24, 26, and 40 have been canceled without prejudice, thus obviating this objection.

D. Rejections Under 35 U.S.C. 112

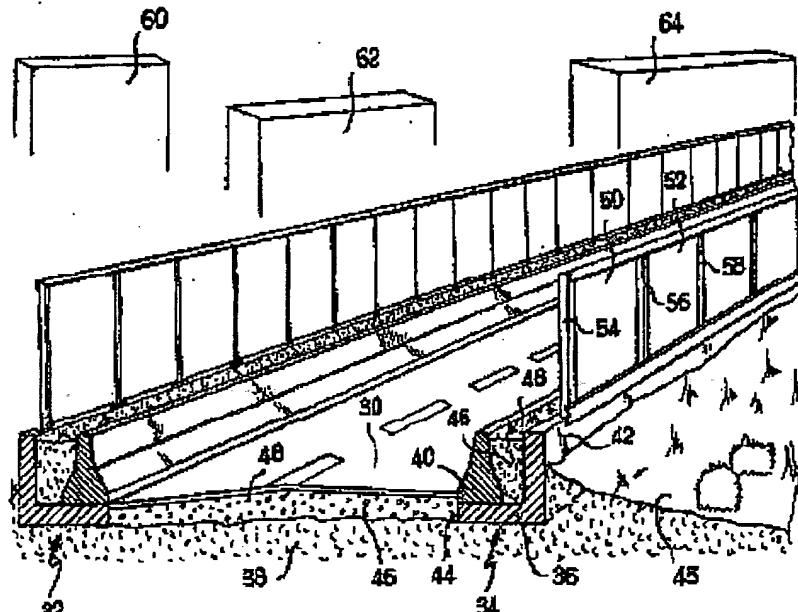
In the present Office Action, claims 12, 14, 24, 26, and 40 were examined and rejected under 35 U.S.C. 112 as failing to comply with the enablement requirement. By this amendment, claims 12, 14, 24, 26, and 40 have been canceled without prejudice, thus obviating the rejection of these claims.

E. Rejections Under 35 U.S.C. 102

Claims 1-4, 9, 15-18, 22, and 29 were examined and rejected under 35 U.S.C. 102 as allegedly being anticipated by Salviam-Brun (French Patent No 2,457,928). Applicants traverse this rejection and reconsideration is respectfully requested for the following reasons.

Applicants' claim 1 is directed to a traffic noise barrier system comprising, inter alia, a plurality of transverse beams each extending from a back surface of the longitudinal barrier to one upstanding post in a plurality of upstanding posts for supporting the traffic noise barrier wall. Similarly, Applicants' claim 17 is directed to a traffic noise barrier system comprising, inter alia, a plurality of transverse beams each having a first end coupled to the back surface of the longitudinal barrier and a second end coupled to the traffic noise barrier wall for supporting the traffic noise barrier wall.

In contrast, Salviam-Brun is directed to a combined roadside safety kerb and support for anti-noise panels, which is made from reinforced concrete in the form of a U-shaped channel open at the top. As shown in Fig. 2 of Salviam-Brun, which is reproduced below, the base 36 of the U-shaped channel is buried in the ground, one side of the U-shaped channel forms the safety kerb 40, and the other side of the U-shaped channel, which is partially buried in the ground, forms a support 24 for the upstanding posts 54, 56, 58 and panels 50, 52. The U-shaped channel extends along the length of the road, and may be used for drainage or filled with earth.

FIG. 2

As evident in Fig. 2, Salviam-Brun does not teach or suggest a plurality of transverse beams each extending from a back surface of the longitudinal barrier to one upstanding post in a plurality of upstanding posts, as recited in Applicants' claim 1, nor does Salviam-Brun teach or suggest a plurality of transverse beams each having a first end coupled to the back surface of the longitudinal barrier and a second end coupled to the traffic noise barrier wall, as recited in Applicants' claim 17. Even if the bottom and side portions 42, 44 of the U-shaped channel of Salviam-Brun could be considered "transverse beams" (which Applicant believes they cannot) neither the bottom nor side portions 42, 44 of the U-shaped channel can be considered a beam extending from a back surface of the longitudinal barrier to an upstanding post, as recited in Applicants' claim 1, or a beam having a first end coupled to the back surface of the longitudinal barrier and a second end coupled to the traffic noise barrier wall, as recited in Applicants' claim 17. As shown in Fig. 2 of Salviam-Brun, the bottom portion 42 extends from beneath the safety kerb 40 to the side portion 44, and the side portion 44 extends from the bottom portion 42 to the

noise barrier wall (posts 54, 56, 58 and panels 50, 52).

Because Salviam-Brun does not teach or suggest a traffic noise barrier system comprising, *inter alia*, a plurality of transverse beams each extending from a back surface of the longitudinal barrier to one upstanding post in a plurality of upstanding posts, Applicants' claim 1 and dependent claims 4, 9, 15, and 16 are allowable over Salviam-Brun. Similarly, because Salviam-Brun does not teach or suggest a traffic noise barrier system comprising, *inter alia*, a plurality of transverse beams each having a first end coupled to the back surface of the longitudinal barrier and a second end coupled to the traffic noise barrier wall, Applicants' claim 17 and dependent claims 18, 22, and 29 are allowable over Salviam-Brun.

D. Rejections Under 35 U.S.C. 103(a)

1. Claim 5 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Salviam-Brun in view of Coburn. More specifically, the Examiner alleges that although Salviam-Brun discloses a traffic noise barrier having a structure capable of catching debris falling between the barrier and the barrier wall, Salviam-Brun fails to disclose the structure as comprising a grating plate formed of rigid material. The Examiner further alleges that Coburn teaches sound absorbing gabions comprising a wire cage filled with sound absorbing and ballast material that are disposed adjacent roadways. Applicants traverse this rejection and reconsideration is respectfully requested for the following reasons.

First, one skilled in the art would not be motivated to combine the teaching of Salviam-Brun with the teaching of Coburn in the manner suggested by the Examiner. Salviam-Brun teaches a combined roadside safety kerb and support for anti-noise panels. Coburn, on the other hand, teaches a gabion (a prismatic wire cage filled with resilient material and ballast material) placed in the potential path of a vehicle for cushioning the impact of vehicles striking the gabion and for providing a noise barrier. Both the gabion taught by Coburn and the combined roadside safety kerb and support for anti-noise panels taught by Salviam-Brun perform the same functions -- a roadside safety barrier and noise barrier. One skilled in the art would not be motivated to use the gabion of Coburn, which is as a roadside safety barrier and noise barrier, to catch debris falling between the safety kerb and anti-noise panel of Salviam-Brun as alleged by the Examiner.

Accordingly, the rejection of claim 5 as allegedly being unpatentable over Salviam-Brun in combination with Coburn is improper, and Applicants respectfully request that this rejection be withdrawn.

Second, if Salviam-Brun and Coburn could be combined, the combination would not result in Applicants' claimed invention. As described above with reference to Applicants' claim 1, Salviam-Brun does not teach or suggest a plurality of transverse beams each extending from a back surface of the longitudinal barrier to one upstanding post in a plurality of upstanding posts for supporting the traffic noise barrier wall. Coburn fails to cure this deficiency of Salviam-Brun; therefore, claim 5, which depends from claim 1, is allowable over the combination of Salviam-Brun and Coburn. For at least this additional reason, Applicants respectfully request that the rejection of claim 5 as allegedly being unpatentable over Salviam-Brun in light of Coburn be reconsidered and withdrawn.

2. Claims 11, 13, 23, 25, 30, 31, 36, 37, and 41-43 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Salviam-Brun in view of Sullivan. More specifically, the Examiner alleges that Salviam-Brun discloses each limitation of these claims, but does not disclose the spacing between the barrier and the barrier wall. The Examiner further alleges that Sullivan discloses that concrete "jersey-style" barriers are commonly 54 inches tall, and that it would be obvious from Fig. 2 of Salviam-Brun that the barrier wall is illustrated to be at least 34 inches from a front vertical plane of the front face of the barrier. Applicants traverse this rejection and reconsideration is respectfully requested for the following reasons.

Neither Salviam-Brun nor Sullivan, alone or in combination, teach or suggest that the traffic noise barrier wall be positioned at a distance greater than about 18 inches from a vertical plane disposed at the front surface of the longitudinal barrier, as recited in claims 11 and 23, or that this distance be greater than about 34 inches, as recited in claims 13, 25, and 37. Furthermore, neither Salviam-Brun nor Sullivan teach or suggest that the plurality of upstanding posts be spaced apart from the back surface of the longitudinal barrier by at least 30 inches, as recited in claim 30. Indeed, neither Salviam-Brun nor Sullivan discuss the spacing between the front of the longitudinal barrier and the noise barrier wall or why this spacing is significant.

Contrary to the Examiner's allegation, Sullivan does not suggest that jersey-style barriers

are commonly 54 inches tall. As recited in Sullivan:

Although other dimensions of the barrier components may also vary from job to job, in one preferred [embodiment] the base section 18 may be approximately 16 inches wide, while the width adjacent the top surface 16 may only be about 6 inches wide. The height of a barrier component may be fifty four inches between the bottom surface 14 and the top surface 16.

Thus, rather than providing a common height for jersey-style barriers, Sullivan merely provides an example of a height that may be used with his invention. Indeed, it is known that jersey-style barriers may vary in height depending on their application. For example, jersey-style barriers may be 32 inches high, as evidenced in publications by the U.S. Department of Transportation Federal Highway Administration that are appended hereto. Applying the Examiner's rationale to a jersey-style barrier height of 32 inches, Fig. 2 of Salviam-Brun indicates that the distance between the front surface of the barrier and the noise wall is about 16 inches, which is less than that recited in Applicants' claims.

Furthermore, the Examiner's allegation presumes that Fig. 2 of Salviam-Brun is drawn to the same scale used in Sullivan. However, this does not appear to be the case. In the barrier described by Sullivan, the height is 54 inches, the width of the base is 16 inches (less than 1/3 height) and the width of the top is 6 inches (1/9 height). The barrier depicted by Salviam-Brun does not reflect these dimensions. The barrier in Salviam-Brun, as measured using Fig. 2, has a base width of about $\frac{3}{4}$ height and a top width of about $\frac{1}{4}$ height.

Finally, the Examiner's allegation applies only the suggested height of the Sullivan barrier to Fig. 2 of Salviam-Brun, but not the suggested widths. Indeed, if one were to apply the Examiner's rationale to a barrier having Sullivan's suggested base width (16 inches) and top width (6 inches), Fig. 2 of Salviam-Brun indicates that the distance between the front surface of the barrier and the noise wall is about 16 inches, which is less than that recited in Applicants' claims.

In sum, neither Salviam-Brun nor Sullivan, alone or in combination, teach or suggest that

the traffic noise barrier wall be positioned at a distance greater than about 18 inches from a vertical plane disposed at the front surface of the longitudinal barrier, as recited in claims 11 and 23, or that this distance be greater than about 34 inches, as recited in claims 13, 25, and 37. Furthermore, neither Salviam-Brun nor Sullivan, alone or in combination, teach or suggest that the plurality of upstanding posts be spaced apart from the back surface of the longitudinal barrier by at least 30 inches, as recited in claim 30. The only way to determine these dimensions is in hindsight of Applicants' claimed invention. For at least this reason, claims 11, 13, 23, 25, 30, and 37, and dependent claims 31, 36, and 41-43, are allowable over Salviam-Brun in view of Sullivan.

Furthermore, as described above with reference to Applicants' claim 1, from which claims 11 and 13 depend, Salviam-Brun does not teach or suggest a plurality of transverse beams each extending from a back surface of the longitudinal barrier to one upstanding post in a plurality of upstanding posts for supporting the traffic noise barrier wall. Similarly, as described above with reference to Applicants' claim 17, from which claims 23 and 25 depend, Salviam-Brun does not teach or suggest a plurality of transverse beams each having a first end coupled to the back surface of the longitudinal barrier and a second end coupled to the traffic noise barrier wall for supporting the traffic noise barrier wall. Sullivan fails to cure this deficiency of Salviam-Brun; therefore, for at least this additional reason, claims 11, 13, 23, and 25 are allowable over the combination of Salviam-Brun and Sullivan.

3. Claims 6, 10, 19, 27, and 28 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Salviam-Brun in view of Thommen, Jr.. More specifically, the Examiner alleges that Salviam-Brun teaches each limitation of these claims except that Salviam-Brun does not disclose the use of a cable catch system. The Examiner further alleges that Thommen, Jr. teaches that it is advantageous to provide safety net systems for debris and mud slides along roadways, and that it would have been obvious to one of ordinary skill in the art to provide the traffic barrier of Salviam-Brun with a load-bearing cable and tube assembly of Thommen, Jr. in order to accommodate heavy load, mud and debris slides. Applicants traverse this rejection and reconsideration is respectfully requested for the following reasons.

First, one skilled in the art would have no motivation to combine the teaching of Salviam-

Brun with the teaching of Thommen, Jr. in the manner suggested by the Examiner. Salviam-Brun teaches a combined roadside safety kerb and support for anti-noise panels. Thommen, Jr., on the other hand, teaches a safety net system that is placed upright on the ground for restraining mud and debris slides. Combining the teachings of Salviam-Brun and Thommen, Jr. would require replacing the anti-noise panels of Salviam-Brun with the safety net panels of Thommen, Jr. One skilled in the art would not be motivated to make this combination because it would destroy an intended purpose of Salviam-Brun's teaching – to provide a noise barrier. Accordingly, the rejection of claims 6, 10, 19, 27, and 28 as allegedly being unpatentable over Salviam-Brun in combination with Thommen, Jr. is improper, and Applicants respectfully request that this rejection be withdrawn.

Second, if Salviam-Brun and Thommen, Jr. were combined, the combination would not result in Applicants' claimed invention. As described above with reference to Applicants' claim 1, from which claims 6 and 10 depend, Salviam-Brun does not teach or suggest one upstanding post in a plurality of transverse beams each extending from a back surface of the longitudinal barrier to one upstanding post in a plurality of upstanding posts for supporting the traffic noise barrier wall. Similarly, as described above with reference to Applicants' claim 17, from which claims 27 and 28 depend, Salviam-Brun does not teach or suggest a plurality of transverse beams each having a first end coupled to the back surface of the longitudinal barrier and a second end coupled to the traffic noise barrier wall for supporting the traffic noise barrier wall. Thommen, Jr. fails to cure this deficiency of Salviam-Brun; therefore, for at least this additional reason, claims 6, 10, 19, 27, and 28 are allowable over the combination of Salviam-Brun and Thommen, Jr..

Furthermore, if one were to combine Salviam-Brun with Thommen, Jr., the result would not include a traffic noise barrier wall, as recited in Applicants' claims 1 and 17, from which claims 6, 10, 19, 27, and 28 variably depend. Instead, the combination of Salviam-Brun and Thommen, Jr. would result in the U-shaped channel of Salviam-Brun having the safety net system of Thommen, Jr. disposed thereon. Therefore, for at least this additional reason, claims 6, 10, 19, 27, and 28 are allowable over the combination of Salviam-Brun and Thommen, Jr.

Finally, with regard to claims 10, 27 and 28, the combination of Salviam-Brun and

Thommen, Jr. would not yield adjacent upstanding posts interconnected by a segmented tubular bar having a cable disposed therein. The alleged segmented tubular bar of Thommen, Jr. (tube 51 of Fig. 7) does not interconnect adjacent upstanding posts. Therefore, for at least this additional reason, claims 10, 27, and 28 are allowable over the combination of Salviam-Brun and Thommen, Jr.

4. Claims 34, 35, and 38 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Salviam-Brun in view of Sullivan, as applied to claims 30 and 37, and further in view of Thommen, Jr.. Applicants traverse this rejection and reconsideration is respectfully requested for the following reasons.

First, for the reasons described above with reference to claims 6, 10, 19, 27, and 28, one skilled in the art would have no motivation to combine the teaching of Salviam-Brun with the teaching of Thommen, Jr. in the manner suggested by the Examiner. Accordingly, the rejection of claims 34, 35, and 38 as allegedly being unpatentable over Salviam-Brun in combination with Thommen, Jr. and Sullivan is improper, and Applicants respectfully request that this rejection be withdrawn.

Second, if one were to combine Salviam-Brun, Sullivan, and Thommen, Jr., the result would not include a traffic noise barrier wall, as recited in Applicants' claims 30 and 37, from which claims 34, 35, and 38 variably depend. Instead, the combination of Salviam-Brun, Sullivan, and Thommen, Jr. would result in the U-shaped channel of Salviam-Brun having the safety net system of Thommen, Jr. disposed thereon. Therefore, for at least this reason, claims 34, 35, and 38 are allowable over the combination of Salviam-Brun and Thommen, Jr.

Third, for the reasons described above with reference to claim 37 (from which claim 39 depends), neither Salviam-Brun nor Sullivan, alone or in combination, teach or suggest that the traffic noise barrier wall be positioned at a distance greater than about 34 inches from a vertical plane disposed at the front surface of the longitudinal barrier. The addition of Thommen, Jr. to this combination fails to cure this deficiency. Therefore, for at least this additional reason, claim 39 is allowable over the combination of Salviam-Brun, Sullivan, and Thommen, Jr.

Fourth, for the reasons described above with reference to claim 30 (from which claims 34 and 35 depend), neither Salviam-Brun nor Sullivan teach or suggest that the plurality of

upstanding posts be spaced apart from the back surface of the longitudinal barrier by at least 30 inches. The addition of Thommen, Jr. to this combination does not cure this deficiency. Therefore, for at least this additional reason, claims 34 and 35 are allowable over the combination of Salviam-Brun, Sullivan, and Thommen, Jr.

Finally, with regard to claims 34, 35, and 39, the combination of Salviam-Brun, Sullivan, and Thommen, Jr. would not yield adjacent upstanding posts interconnected by a segmented tubular bar having a cable disposed therein. The alleged segmented tubular bar of Thommen, Jr. (tube 51 of Fig. 7) does not interconnect adjacent upstanding posts. Therefore, for at least this additional reason, claims 34, 35, and 39 are allowable over the combination of Salviam-Brun, Sullivan, and Thommen, Jr.

5. Claims 7, 8, 20, and 21 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Salviam-Brun in view of Shima et al. More specifically, the Examiner alleges that Salviam-Brun teaches each limitation of these claims except what the panels are made from. The Examiner further alleges that Shima et al. teaches that noise control barriers are advantageously made from glass wool fibers, "which are obviously transparent," and that it would have been obvious to one of ordinary skill in the art to provide the noise control barrier of Salviam-Brun, with the sound diffracting panels taught by Shima et al. Applicants traverse this rejection and reconsideration is respectfully requested for the following reasons.

As described above with reference to Applicants' claim 1, from which claims 7 and 8 depend, Salviam-Brun does not teach or suggest a plurality of transverse beams each extending from a back surface of the longitudinal barrier to one upstanding post in a plurality of upstanding posts for supporting the traffic noise barrier wall. Similarly, as described above with reference to Applicants' claim 17, from which claims 20 and 21 depend, Salviam-Brun does not teach or suggest a plurality of transverse beams each having a first end coupled to the back surface of the longitudinal barrier and a second end coupled to the traffic noise barrier wall for supporting the traffic noise barrier wall. Shima et al. fails to cure this deficiency of Salviam-Brun; therefore, for at least this additional reason, claims 7, 8, 20, and 21 are allowable over the combination of Salviam-Brun and Shima et al.

Furthermore, neither Salviam-Brun nor Shima et al., alone or in combination, teach or

suggest the use of transparent panels. While Shima et al. teaches that a panel may include sound absorbing material such as "glass wool", it does not suggest that the glass wool is transparent. Moreover, it does not suggest that the panel is transparent, as recited in Applicants' claims 7 and 20. Therefore, for at least this additional reason, claims 7 and 20 are allowable over the combination of Salviam-Brun and Shima et al.

6. Claims 32, 33, 38, and 44 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Salviam-Brun in view of Sullivan, as applied to claims 30 and 37, in further view of Shima et al. Applicants traverse this rejection and reconsideration is respectfully requested for the following reasons.

For the reasons described above with reference to claim 30 (from which claims 32 and 33 depend), neither Salviam-Brun nor Sullivan teach or suggest that the plurality of upstanding posts be spaced apart from the back surface of the longitudinal barrier by at least 30 inches. The addition of Shima et al. to this combination does not cure this deficiency. Therefore, for at least this additional reason, claims 32 and 33 are allowable over the combination of Salviam-Brun, Sullivan, and Shima et al.

For the reasons described above with reference to claim 37 (from which claims 38 and 44 depend), neither Salviam-Brun nor Sullivan, alone or in combination, teach or suggest that the traffic noise barrier wall be positioned at a distance greater than about 34 inches from a vertical plane disposed at the front surface of the longitudinal barrier. The addition of Shima et al. to this combination fails to cure this deficiency. Therefore, for at least this additional reason, claims 38 and 44 are allowable over the combination of Salviam-Brun, Sullivan, and Shima et al.

Furthermore, neither Salviam-Brun, Sullivan, nor Shima et al., alone or in combination, teach or suggest the use of transparent panels. While Shima et al. teaches that a panel may include sound absorbing material such as "glass wool", it does not suggest that the glass wool is transparent. Moreover, it does not suggest that the panel is transparent, as recited in Applicants' claims 32 and 44. Therefore, for at least this additional reason, claims 32 and 44 are allowable over the combination of Salviam-Brun, Sullivan, and Shima et al.

7. Claims 12 and 14 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Salviam-Brun in view of Keller et al. Claims 12 and 14 have been canceled,

rendering this rejection moot.

E. Conclusion

Entry of this amendment and reconsideration of the claims as amended is respectfully requested. It is believed that the amendment places the claims in condition for allowance. It is further believed that the foregoing remarks are fully responsive to the Office Action. Accordingly, reconsideration and allowance is respectfully requested.

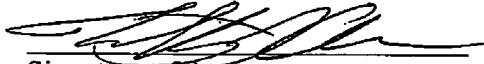
If the Examiner has any questions or believes that a discussion with Applicants' attorney would expedite prosecution, the Examiner is invited and encouraged to contact the undersigned at the telephone number below.

The Examiner is hereby authorized to apply any credits or charge any deficiencies related to this Amendment to our Deposit Account No. 23-1665.

Appended hereto for the convenience of the Examiner are various pages from the U.S. Department of Transportation Federal Highway Administration web site (www.fhwa.dot.gov) which show New Jersey Concrete Barriers having a height of 32 inches, as discussed above on page 15.

Respectfully submitted,
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